

6169-95



# IP&L Disclosure Evaluation: BOC8-1998-0100

Created By: Kerry Ortega Created On: 11/03/98 10:22:03 AM  
 Last Modified By: Kerry Ortega Last Modified On: 11/03/98 10:30:51 AM

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Required fields are marked with the asterisk (\*) and must be filled in to complete the form.

IBM CONFIDENTIAL - PREPARED BY/AT REQUEST OF IBM ATTORNEY - PRIVILEGE REVIEW REQUIRED

Title: Process for determining if excess noise is present in a computer system

Response Due to IBM  
 12/02/98

Date Evaluation Submitted  
 11/03/98

## Evaluator Disclosure Instructions

<b>FACTOR 1: TECHNICAL CONTRIBUTION</b> (Consider known publications/products, IBM's own efforts) Respond to the above answer (please specify any technology moved into the inventory of the evaluator, and explain its relevance)	<input type="radio"/> Substantial improvement <input type="radio"/> Minor Variation from known technology <input checked="" type="radio"/> Significant Departure from known technology <input type="radio"/> Major Advance in technology
	Most of the speech systems do not do anything to look for internal noise and those that do only do it superficially.

<b>FACTOR 2: CHARACTER OF PROBLEM SOLVED</b> Explain the problem, including describing alternatives and their drawbacks, and any advantages of this invention. What is the most important aspect of the disclosure and the most important advantages/disadvantages in your view? Do others besides IBM face the problem? Why or why not?	<input type="radio"/> No real problem existed <input type="radio"/> Minor problem. Several alternatives available <input type="radio"/> Significant problem. Alternatives have drawbacks <input checked="" type="radio"/> Major problem. No feasible alternatives
	To be really effective in looking at system noise, all components of the computer need to be tested in a systematic approach.
	<input checked="" type="radio"/> Yes <input type="radio"/> No Any speech system can be a victim of system noise.

<b>FACTOR 3: USE BY IBM</b> Explain the use of the disclosure by IBM. Be specific. What is the most important aspect of the disclosure and the most important advantages/disadvantages in your view? Do others besides IBM face the problem? Why or why not?	<input type="radio"/> Not used <input type="radio"/> Used in a limited way <input type="radio"/> Used in a significant way <input type="radio"/> Used in a major way

<b>FACTOR 4: USE BY OTHERS</b> Explain the use of the disclosure by others. Be specific. What is the most important aspect of the disclosure and the most important advantages/disadvantages in your view? Do others besides IBM face the problem? Why or why not?	<input type="radio"/> Not used <input type="radio"/> Used in a limited way <input type="radio"/> Used in a significant way <input type="radio"/> Used in a major way

<b>FACTOR 5 - DISCOVERY OF NON-IBM (NI) USE</b>	
<input type="radio"/> NI most definitely used for IBM to know <input type="radio"/> Tear-down of NI product would be necessary <input type="radio"/> Current analysis of NI product or manual required <input type="radio"/> Use of tools to casual observer	Any analysis or system notes must be reported to the user. This is a careful analysis of the NI product should be able to determine if it's providing this function.
Reason for above answer:	

<b>FACTOR 6 - ADEQUACY OF DESCRIPTION</b>	
<input type="radio"/> Inadequate information unless both described <input type="radio"/> Incomplete information aspect poorly described or obscure <input type="radio"/> Further clarification or implementation detail needed <input checked="" type="radio"/> Clear and complete as is	Should be implemented using existing programming techniques
Reason for above answer:	

<b>FACTOR 7 - PEOPLE CONSULTED</b>	
Discussed (s) Name others consulted: Discussed evaluation and recommendation with inventors?	<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Yes <input type="radio"/> No

**Evaluator Decision Instructions**

<b>Evaluator Recommended Decision:</b>	<input type="radio"/> Close <input type="radio"/> Publish <input checked="" type="radio"/> Search
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☐ Additional Search Info: This disclosure should be MERGED before searching and filing with disclosure (s)

<b>Comments:</b>
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Note : Limit your comments to technical/business issues

(Form Revised 12/17/97)

Process for determining if excess noise is present in a computer system

	<b>Disclosure BOC8-1998-0100</b>
	Created By: Ron Van Buskirk    Created On: 10/30/98 04:34:18 PM
	Last Modified By: Joanne Ferguson    Last Modified On: 11/03/98 09:31:25 AM
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Required fields are marked with the asterisk (\*) and must be filled in to complete the form.

### Summary

Status	Under Evaluation
Processing Location	BOC
Functional Area	Speech Development & Customization (O. Osborne)
Attorney/Patent Professional	Richard Tomlin/Boca Raton/IBM
IDT Team	Kerry Ortega/Boca Raton/IBM
Submitted Date	10/30/98 04:55:29 PM
Owning Division	CHQ
PVT Score	To calculate a PVT score, use the "Calculate PVT" button.

### Inventors with Lotus Notes ID's

Inventors: Frank Fado/West Palm Beach/IBM, Peter Guasti/West Palm Beach/IBM, Amado Nassiff/West Palm Beach/IBM, Ron Van Buskirk/West Palm Beach/IBM

Inventor Name > denotes primary contact	Inventor Serial	Div/Dept	Manager Serial	Manager Name
Fado, Frank	331070	9T/A28A	375209	Nassiff, Amado
Guasti, P. (Peter)	326344	9T/A28A	375209	Nassiff, Amado
Nassiff, Amado	375209	9T/95GA	037340	Villar, Maria G.
VanBuskirk, R.E. (Ron)	689867	9T/A28A	375209	Nassiff, Amado

### Inventors without Lotus Notes ID's

#### IDT Selection

#### Main Idea

Title of disclosure (in English)  
Process for determining if excess noise is present in a computer system

Idea of disclosure

1. Describe your invention, stating the problem solved (if appropriate), and indicating the advantages of using the invention.

This invention identifies audio noise in a computer system.

Excess noise can adversely affect applications that require clean audio signals to properly function. This noise can be categorized into two types: (1) External (background) noise and (2) Internal (system) noise. Although both types of noise can have detrimental effects, the presence of external noise is easily recognizable in that they are sounds that a user can actually hear in their environment. Internal noise is not so recognizable and in most instances goes undetected by the user.

It is this internal noise that we would like to identify and bring to the attention of the user. By being aware of the internal noise the user can remove it or avoid a system that contains it. This translates into more productive audio application usage for the user.

Process for determining if excess noise is present in a computer system

2. How does the invention solve the problem or achieve an advantage, (a description of "the invention", including figures inline as appropriate)?

The process involves taking two or more samples of audio data (see Figure 1).

1. Take one sample of the audio system at rest to get a baseline and to record any noise inherent in the audio system implementation.
2. Take another sample of audio system with the following system components being exercised:
  - microphone (internal/external) [speech sample]
  - speakers (internal/external) [play sound sample]
  - the hard disk [defragging/file transfers]
  - diskette, CD-ROM, ZIP, tape drive [file transfers]
  - communications adapter (i.e., token ring, ethernet, ISDN, etc.) [file transfers over a network]
  - modem (internal/external) [file transfers on the phone line]
  - keyboard/pointing device (especially on laptops) [human interaction like typing or moving the pointing device]
  - printer [print test page]
  - scanner [scan a page in]

Then make a comparison, based on Signal-to-Noise ratio (or similar metric), to determine if and to what extent these system components play in the creation of internal noise. This information can then be presented to the user, with possible solutions, in a readable format (see Figure 2).

Process for determining if excess noise is present in a computer system

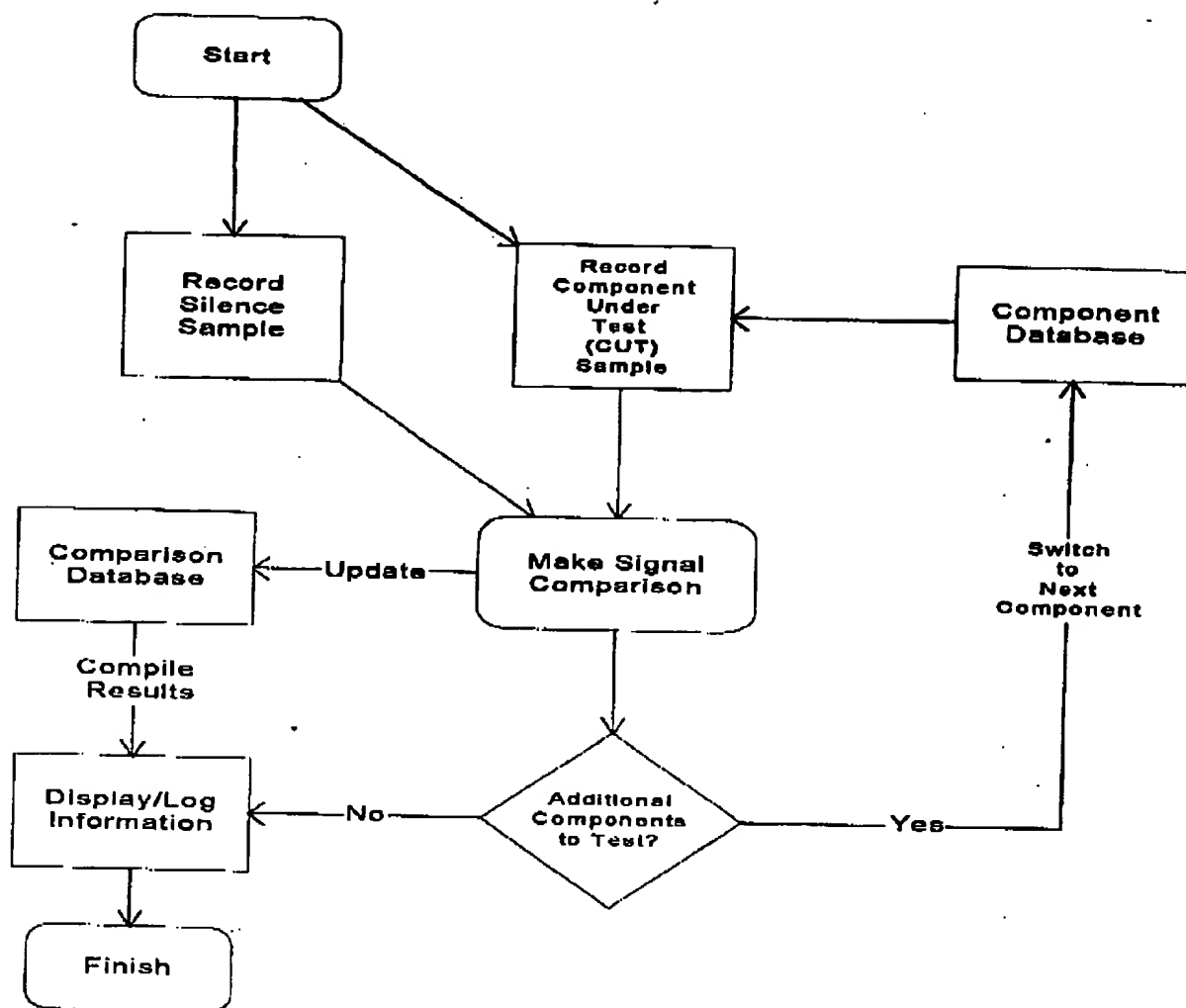


Figure 1 - Logic Flow Diagram

Process for determining if excess noise is present in a computer system

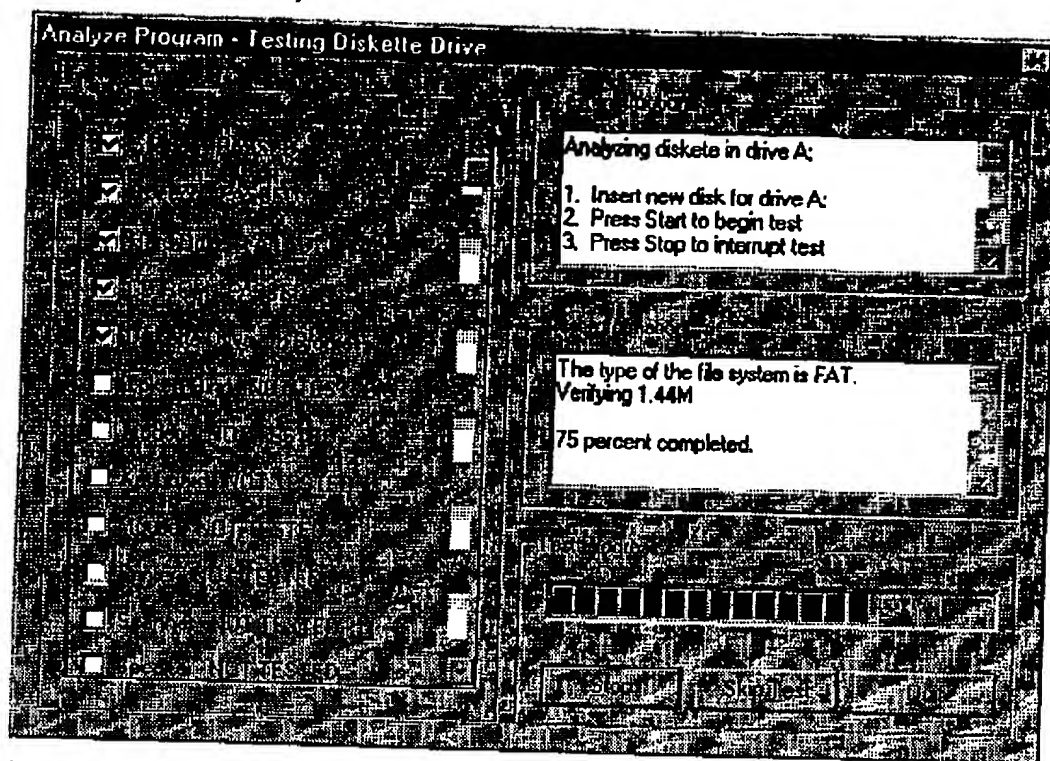


Figure 2 - Sample User Interface

3. If the same advantage or problem has been identified by others (inside/outside IBM), how have those others solved it and does your solution differ and why is it better?

Dragon Systems has a similar noise detection instrument. However it is much cruder because it only appears to measure the gross signal to noise ratio. It doesn't perform any trouble-shooting as to which particular sub-system is the source of the noise. It also isn't as thorough. For example, if the hard drive wasn't running while the user was recording, they might never discover why noise was being introduced into their system intermittently.

4. If the invention is implemented in a product or prototype, include technical details, purpose, disclosure details to others and the date of that implementation.

**\*Critical Questions ( Questions 1 - 7 must be answered)**

**Patent Value Tool (Optional - this may be used by the inventor and attorney to assist with the eval Post Disclosure Text & Drawings .**

(Form Revised 12/17/97)

SENT BY:

2- 6- 3 ; 5:01PM ; AKERMAN SENT TT→

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**FAX COVER SHEET**

From: Kevin T. Cuenot, Esquire

Date: February 6, 2003

PLEASE DELIVER 1 PAGE(S) (including cover sheet) TO:

6169-95

Name: Examiner Angela A. Armstrong  
Company: USPTO - Group Art 2654

Fax Number: 703-872-9314  
Phone Number:

Please call if you do not receive all the pages.

**Comments/Special Instructions**

RE: Applicants: Fado, et al.  
Serial No.: 09/399,873  
Confirmation No.: 2778  
Date Filed: September 20, 1999  
Examiner: Armstrong, Angela A.  
Group: 2654  
Entitled: PROCESS FOR IDENTIFYING EXCESS  
NOISE IN A COMPUTER SYSTEM

Response to Office Action under 37 C.F.R. §1.116

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{WP120852;1}

Received from <5616596313> at 2/6/03 5:02:06 PM [Eastern Standard Time]

**PATENT**

Docket No. 6169-95

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Fado, *et al.*

Confirmation No.: 2778

Serial No.: 09/399,873

Examiner: Armstrong, A. A.

Date Filed: September 20, 1999

Group: 2654

For: PROCESS FOR IDENTIFYING EXCESS NOISE  
IN A COMPUTER SYSTEM

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**TRANSMITTAL LETTER**

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Commissioner for Patents  
Box AF  
Washington, DC 20231

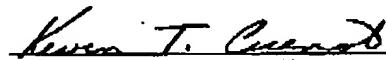
Sir:

Please find enclosed for filing:

1. Response to Office Action
2. Applicants' Invention Disclosure;
3. Change of Correspondence Address;
4. Please charge any deficiencies or credit any overpayment to Deposit Account No. 50-0951.

This Transmittal Letter is submitted in duplicate.

Respectfully submitted,

Date: 2/6/03  
\_\_\_\_\_  
Gregory A. Nelson, Registration No. 30,577  
Kevin T. Cuenot, Registration No. 46,283  
AKERMAN SENTERFITT  
222 Lakeview Avenue, Suite 400  
Post Office Box 3188  
West Palm Beach, FL 33402-3188  
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{WP120824;1}

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**Certificate Under 37 CFR 1.8(a)**

I hereby certify that this correspondence is being transmitted via facsimile to the Commissioner for Patents, via facsimile number 703-872-9314 on

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Kevin T. Cuenot, Esquire, Reg. No. 46,283



Official

PATENT

Docket No. 6169-95

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Fado, *et al.*

Confirmation No.: 2778

Serial No.: 09/399,873

Examiner: Armstrong, A. A.

Date Filed: September 20, 1999

Group: 2654

For: PROCESS FOR IDENTIFYING EXCESS NOISE  
IN A COMPUTER SYSTEM

## TRANSMITTAL LETTER

Commissioner for Patents  
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Washington, DC 20231

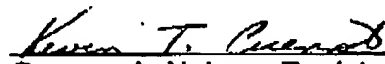
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Gregory A. Nelson, Registration No. 30,577  
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{WP120824;1}

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Kevin T. Cuenot, Esquire, Reg. No. 46,283